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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/712,451	11/12/2003	Dale Wolin	10012464-4	9435

7590

10/11/2005

HEWLETT-PACKARD COMPANY
Intellectual Property Administration
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EXAMINER

LUK, LAWRENCE W

ART UNIT	PAPER NUMBER
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2187

DATE MAILED: 10/11/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

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Office Action Summary

Application No.

10/712,451

Applicant(s)

WOLIN ET AL.

Examiner

Lawrence W. Luk

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 13 June 2005.
- 2a) ☐ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-3,8-11,14,15,17-20,25-28,30,31,33 and 39-43 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☒ Claim(s) 1-3,8-11,14,15,17-20,25-28,30,31,33,39 and 42 is/are allowed.
- 6) ☒ Claim(s) 40,41 and 43 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date _____.
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: _____.

DETAILED ACTION

1. The indicated allowability of claims 40, 41 and 43 are withdrawn in view of the newly discovered reference(s) to S et al. (5,714,866); Leboe (2002/0175657). The instant application having Application No. 10/712,451 has a total of 25 claims pending in the application; there are 9 independent claims and 16 dependent claims, all of which are rejections based on the newly cited reference(s) follow.

Claim Rejections - 35 USC § 102

2. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

3. Claims 40 and 41 are rejected under 35 U.S.C. 102(b) as being anticipated by S et al. (5,714,866).

Claim 40

As to claim 40, S et al. disclose to figure 1, an apparatus for exercising a battery, comprising: a charging circuit (64) having a charging current output coupled to the battery (62); a temperature sensor (66) positioned to sense a temperature related to the battery temperature; a discharging circuit having a variable impedance load and a discharging current input coupled to the battery; and a controller (60) coupled to said temperature sensor (66), said charging circuit (64), and said discharging circuit, said controller (60) being operable to minimize said charging current and said discharging

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current in accordance with said temperature and to vary the impedance of said load.

(see the paragraph bridging column 1 and 2).

Claim 41

As to claim 41, S et al. disclose in figure 1, an apparatus for exercising a battery, comprising a charging circuit (64) having a charging current output coupled to the battery (62); a discharging circuit (68) having a discharging current input coupled to the battery (62); a temperature sensor (66) positioned to sense a temperature related to the battery temperature and said discharging circuit; and a controller (60) coupled to said temperature sensor (66), said charging circuit, and said discharging circuit, said controller being operable to minimize said charging current and said discharging current in accordance with said temperature and to vary the impedance of said load. **(see the paragraph bridging column 1 and 2).**

4. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

5. Claim 43 is rejected under 35 U.S.C. 102(e) as being anticipated by Leboe (2002/0175657).

Claim 43

As to claim 43, Leboe disclose in figure 3, a method of exercising a battery coupled to a load, the method comprising the steps of; sensing (32) a temperature related to the battery (14) temperature and the temperature of the load (18); setting a discharging current in accordance with said temperature (see column 3, [0042]); discharging the battery at said discharging current (30); discontinuing said discharging step when a predetermined battery voltage is reached (see column 3, [0044]); setting a charging current in accordance with said temperature, said setting step further including the step of minimizing said discharging current when said temperature is higher than a second predetermined threshold value (see column 2, [0018]); and charging the battery at said charging current.

Allowable Subject Matter

6. Claims 1-3, 8-11,14,15,17-20, 25-28,30,31,33, 39 and 42 are allowed.

Claim 1

The primary reasons for allowance of claim 1 is the inclusion of **said temperature is higher than a first predetermined threshold value, said controller being operable to set said charging current to a maximum value when said temperature is lower than a second predetermined threshold value, said maximum value being the battery's maximum specified charging current, and said second predetermined threshold value being the battery's maximum**

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charging temperature. The prior art of record neither anticipates nor renders obvious the above recited combination.

Claims 2, 3 and 8 depends from claim 1 and therefore is allowable for at least the same reasons noted above with respect to claim 1.

Claim 9

The primary reasons for allowance of **claim 9** is the inclusion of **a memory coupled to said controller having a look up table with temperature versus discharging current and values of said variable impedance load stored therein, whereby said controller accesses said look up table to set said discharging current.** The prior art of record neither anticipates nor renders obvious the above recited combination.

Claims 10, 11, 14, 15 and 17 depends from claim 9 and therefore is allowable for at least the same reasons noted above with respect to claim 9.

Claim 18

The primary reasons for allowance of **claim 18** is the inclusion of **setting a charging current in accordance with said sensed temperature, further including the step of setting said charging current to a maximum value when said temperature is lower than a first predetermined threshold value, said maximum value being the battery's maximum specified charging current, and said first predetermined threshold value is the battery's maximum charging temperature and minimizing said charging current when said temperature is higher than a**

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second predetermined threshold. The prior art of record neither anticipates nor renders obvious the above recited combination.

Claims 19, 20 and 25 depends from claim 18 and therefore is allowable for at least the same reasons noted above with respect to claim 18.

Claim 26

The primary reasons for allowance of **claim 26** is the inclusion of **setting a discharging current in accordance with said temperature by recalling a discharging current corresponding to said sensed temperature from a look up table; discharging the battery at said discharging current with ; discharging circuit having a variable impedance load, the impedance of said load being selected from said look up table.** The prior art of record neither anticipates nor renders obvious the above recited combination.

Claims 27, 28, 30, 31 and 33 depends from claim 26 and therefore is allowable for at least the same reasons noted above with respect to claim 26.

Claim 39

The primary reasons for allowance of **claim 39** is the inclusion of **a controller coupled to said temperature sensor and said charging circuit and operable to control said charging circuit in accordance with said temperature, said controller being operable to set said charging current to a maximum value when said temperature is lower than a first predetermined threshold value, said maximum value being the battery's maximum specified charging current. and said first predetermined threshold value is the battery's maximum charging temperature**

and said controller being operable to minimize said charging current when said temperature is higher than a second predetermined threshold value.

The prior art of record neither anticipates nor renders obvious the above recited combination.

Claim 42

The primary reasons for allowance of **claim 42** is the inclusion of **setting a charging current in accordance with said sensed temperature, further including the step of setting said charging current to a maximum value when said temperature is lower than a first predetermined threshold value, said maximum value being the battery's maximum specified charging current, and said first predetermined threshold value is the battery's maximum charging temperature and minimizing said charging current when said temperature is higher than a second predetermined threshold value.** The prior art of record neither anticipates nor renders obvious the above recited combination.

7. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Lawrence W Luk whose telephone number is (571)272-2080. The examiner can normally be reached on 7 a.m. to 5 p.m..

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Donald A Sparks can be reached on (571)272-4201. The fax phone number for the organization where this application or proceeding are (703)746-7239, (571)272-2100 for regular communication and (703)746-7238 for After Final communications.

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Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to receptionist whose telephone number is (571)272-2100.

LWL

October 4, 2005

Lawrence Huk

Examiner

10/4/05